

**AMENDMENTS TO THE CLAIMS**

1           1. (Currently Amended) A serial communications link system comprising:  
2                   a scrambler device for receiving an original data bit stream and converting  
3 said original converting-original-received data bit stream into scrambled data; and  
4                   an ECC encoder device for converting said scrambled data into ECC-encoded  
5 data.

1           2. (Original) The system as recited in Claim 1, further comprising:  
2                   a serializer for converting said ECC-encoded data into serialized data;  
3                   wherein the ECC-encoded data includes frame alignment information; and  
4                   the system further comprises a receiver for receiving said serialized data and  
5 converting the serialized data into data frames based upon the frame alignment information.

1           3. (Currently Amended) The system as recited in Claim 2, wherein the receiver  
2 comprises:  
3                   a frame-recoverer for converting said serialized data into data frames;  
4                   an ECC decoder for converting said data frames into ECC-decoded data and  
5 error indications; and  
6                   a ~~scrambler~~ descrambler for converting said ECC-decoded data into de-  
7 scrambled data.

1           4. (Previously Presented) The system as recited in Claim 3, wherein said frame-  
2 recoverer uses said error indications in converting said serialized data into data frames.

1           5. (Original) The system as recited in Claim 1, wherein said ECC encoder applies an  
2 error correction code in converting said scrambled data into said ECC-encoded data.

1           6. (Currently Amended) A serial communications method, comprising the steps of:  
2                     receiving an original data bit stream at a scrambler device, said original data  
3 bit stream comprising data bits and other bits;  
4  
5                     converting said original-received data bit stream into scrambled data, by said  
6 scrambler device, prior to performing another data function on said original data bit stream;  
7 and  
8                     converting said scrambled data into ECC-encoded data.

1           7. (Original) The method as recited in Claim 6, further comprising the steps of:  
2                     generating a serial stream of the ECC-encoded data; and  
3                     transmitting said serial stream.

1           8. (Original) The method of Claim 7, wherein:  
2                     the ECC-encoded data includes frame alignment information; and  
3                     the method further comprises receiving said serialized data and converting  
4 said serialized data into data frames based upon said frame alignment information.

1           9. (Original) The method of Claim 7, further comprising:  
2                     receiving said serialized data;  
3                     converting said serialized data into data frames;  
4                     converting said data frames into ECC-decoded data and error indications; and  
5                     converting said ECC-decoded data into de-scrambled data.

1           10. (Original) The method of Claim 9, wherein the step of converting the serialized  
2 data comprises converting the serialized data into data frames based upon said error  
3 indications.

1 11. – 33. (canceled)

1 34. (Currently Amended) A serial communication link system comprising:  
2 a scrambler device programed to convert a received bit stream, having data  
3 bits therein, for converting received data into scrambled data, said received bit stream data  
4 being without redundant bits ~~inserted by said serial communication system~~ and without being  
5 encoded prior to being scrambled ~~or being re-encoded by said serial communication system;~~  
6 and  
7 an ECC encoder programmed to convert ~~for converting~~ said scrambled data  
8 into ECC-encoded data.